

**Fireplace
Manufacturers
Incorporated**

*The Symbol of
Excellence*

(zero clearance)
NATURAL GAS

ELITE Series

F66-328-453 GL-851N/P
GL-851EN/EP

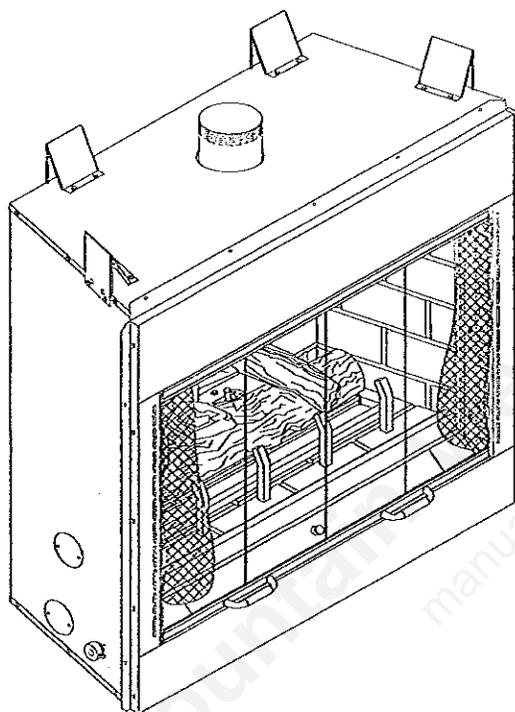
VENTED DECORATIVE GAS APPLIANCE

INSTALLATION AND OPERATING INSTRUCTIONS

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

Warning: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.



D042

- Do not store or use gasoline or any other flammable vapors or liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS :**
 - Do not try to light any appliance.
 - Do not touch any electrical switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This appliance may be installed in an aftermarket* permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency, or the gas supplier.



D779

NOT FOR USE WITH SOLID FUEL

**CHECK WITH LOCAL CODES PRIOR TO
INSTALLATION**

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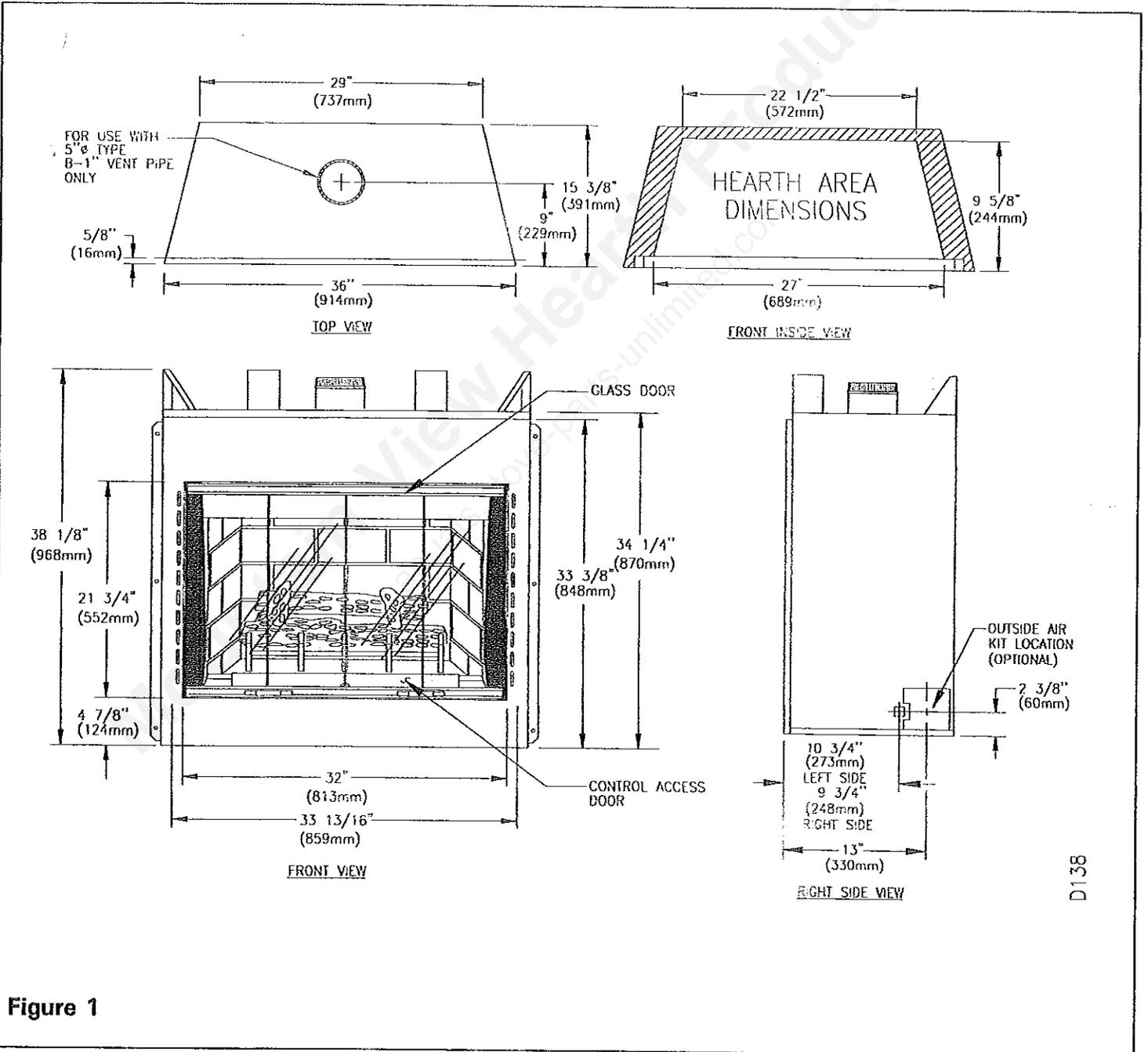


Figure 1

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INTRODUCTION

Models **GL851N/P** and **GL851EN/EP** series are radiant heat decorative gas appliances that use a millivolt gas control valve, with a millivolt ignition system or electronic gas control valve with electronic ignition system. A 5" B-Type Venting System and a listed type vent cap are not supplied but are required for proper operation. See venting instructions on page 6.

WARNING: This gas appliance must not be connected to a chimney flue servicing a solid-fuel burning appliance.

- Models **GL-851N** and **GL851EN** are for use with Natural gas only.
- Models **GL-851P** and **GL851EP** are for use with Propane gas only.

If you have any doubts as to which gas your particular unit is approved and tested for use with, please check the Rating Plate located behind the control access door (see figure 1).

BEFORE YOU BEGIN

Before beginning the installation of your appliance, read the instructions through completely. This FMI appliance and its' approved components are safe when installed according to this installation manual and operated as recommended by FMI. Unless you use FMI approved components tested for this appliance, **YOU MAY CAUSE A FIRE HAZARD!**

The FMI warranty will be voided by and FMI disclaims any responsibility for the following actions:

- A) Modification of the appliance or any of the components.
- B) Use of any component part not approved by FMI in combination with this appliance.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) The burning of anything other than the type of gas approved for use of this gas appliance.

This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code, ANSI/NFPA 70**, or the **Canadian Electrical Code, CSA C22.1**.

The installation must conform with local codes or, in the absence of local codes, with the current **National Fuel Gas Code, ANSI Z223.1**, or the current **CAN/CGA B149, Installation Codes**.

This appliance complies with **ANSI Z21.50-1998/CSA 2.22-M98** as a **Vented Gas Fireplaces** and is listed and tested by the **Canadian Standards Association** to the above test standards.

NOTE: Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance;

otherwise your insurance co. may not cover this appliance.

THIS APPLIANCE IS NOT INTENDED FOR USE AS A PRIMARY SOURCE OF HEAT.

DO NOT CONNECT APPLIANCE BEFORE PRESSURE TESTING GAS PIPING. DAMAGE TO GAS VALVE MAY RESULT AND AN UNSAFE CONDITION MAY BE CAUSED.

The appliance and it's individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa).

GAS RATING		
TYPE OF GAS	NATURAL	L.P. (PROPANE)
MAX. INPUT RATING:	21,000 Btu/hr	21,000 Btu/hr
MANIFOLD PRESSURE:	3.5 in. WC (.87 kPa)	10.0 in. WC (2.49 kPa)
MINIMUM SUPPLY PRESSURE:	4.5 in. WC (1.12 kPa)	11.0 in. WC (2.74 kPa)
MAXIMUM SUPPLY PRESSURE:	10.5 in. WC (2.66 kPa)	13.0 in. WC (3.23 kPa)
ORIFICE SIZE	# 45	#54

For the purpose of input adjustment two pressure taps (for IN and OUT pressures) are provided on the Gas Control Valve for test gauge connections to the appliance.

SELECTING A LOCATION

To determine the safest and most efficient location for your appliance, you should take into consideration the following guidelines:

1. The location must allow for proper clearances (see section on clearances).
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids the cutting of joists or roof rafter will make installation easier. Figure 2 shows a plan view of a few common locations.
4. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

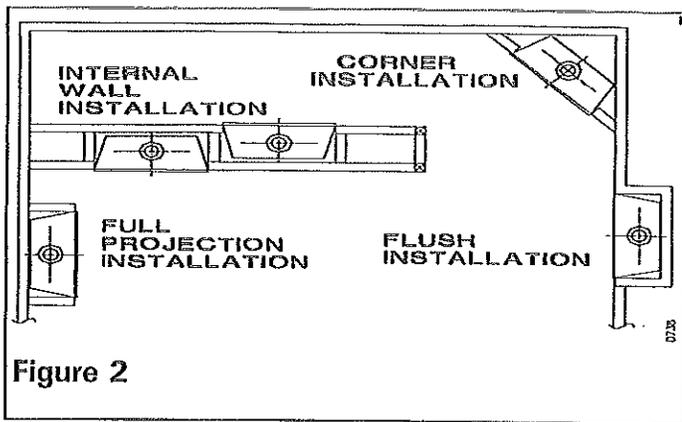


Figure 2

A **flush installation** is recommended where living space is limited or at a premium, and since the space required to enclose the appliance would be located beyond an outside wall; this would also reduce the cutting of joists, roof rafters and such. Check local codes for any restrictions.

Projected installations can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

Corner installations make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference.

An **internal wall installation** provides a discreet option for room separation and can also be ideal as an addition to an existing wall.

ALSO, IN SELECTING A LOCATION, THE FOLLOWING PRECAUTIONS MUST BE OBSERVED:

1. Do not connect this appliance to a chimney system used for a solid fuel burning fireplace.
2. Install in an area providing ventilation and adequate combustion air.
3. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
4. **NEVER** obstruct the front opening of the appliance or the flow of combustion and ventilation air. Keep control compartments accessible.
5. Do not locate in the vicinity where gasoline or other flammable liquids may be stored. The appliance area must be kept clear and free from these combustible materials.
6. A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.

7. If the appliance is installed on a surface other than wood flooring (such as carpeting, tiles etc.), a metal or wood panel should be added, extending the full width and depth of the appliance.

CLEARANCES

MINIMUM CLEARANCES TO COMBUSTIBLES ARE:

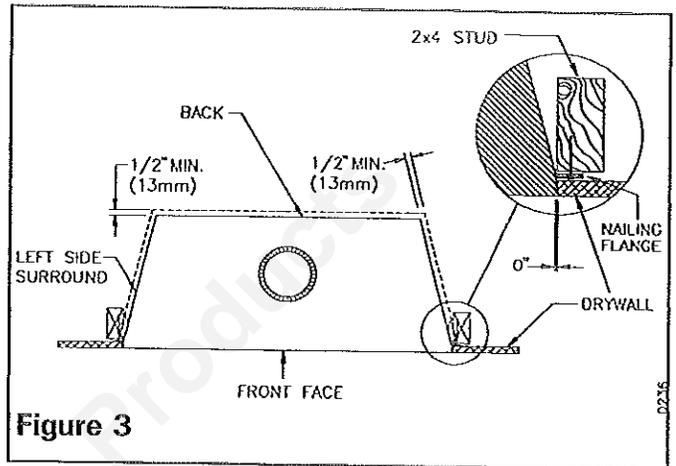


Figure 3

- Back and sides of outer surround:.....1/2" min.
- Drywall to sides of front face:(nailing flanges) 0"
- "B" Vent surfaces:.....1" min.
- Ceiling to opening:.....41 1/2 min.
- Floor:.....0"

CAUTION: DO NOT BLOCK REQUIRED AIR SPACES WITH INSULATION OR ANY OTHER MATERIAL. DO NOT OBSTRUCT EFFECTIVE OPENING OF APPLIANCE WITH ANY TYPE OF FACING MATERIAL.

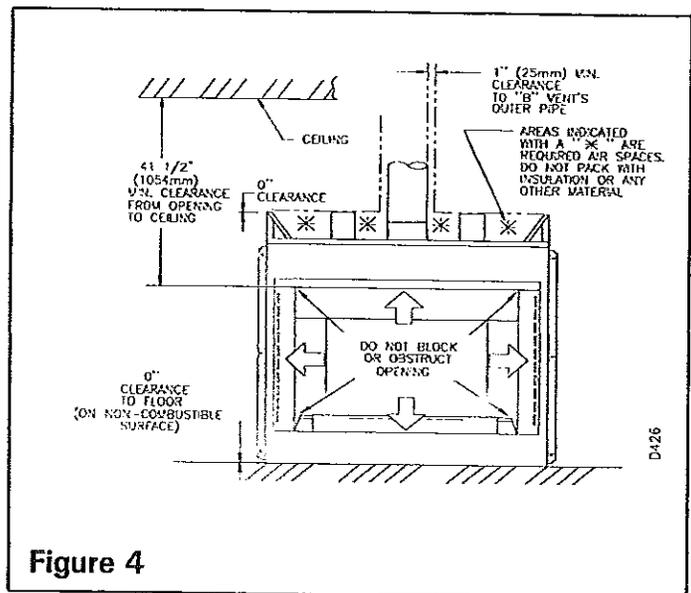


Figure 4

MANTLE CLEARANCES & WALL DETAILS

A combustible mantle shelf maybe installed a maximum 9" (229mm) from the wall and must have a minimum distance of 18" (457mm) above the fireplace opening. Figures 5 and 6 show the minimum allowable distances from various combustible mantle components in relation to the fireplace opening.

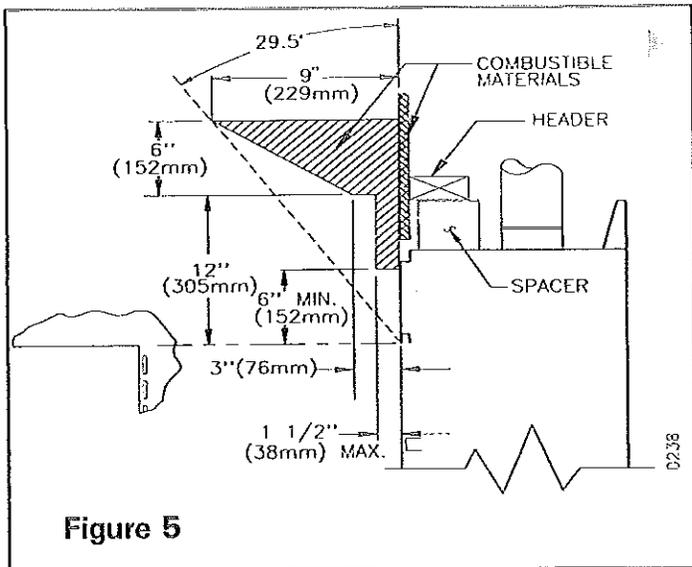


Figure 5

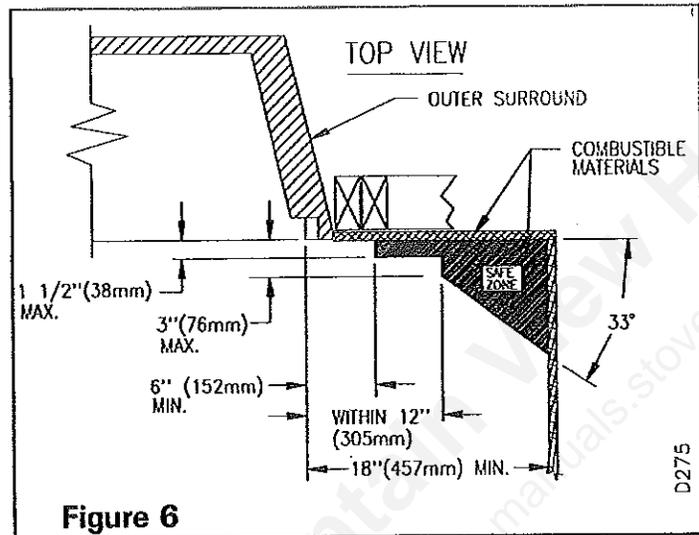


Figure 6

FRAMING

1. Frame appliance enclosure as illustrated in Figures 7 to 9.

NOTE: If a wall covering is used to line the enclosure, then all measurements must be from the surface of the covering.

2. Place the appliance into the framing and secure it.
NOTE: If appliance is to be raised above floor level, a platform must be built to support the appliance.

3. Install the supply line to the appliance using a 1/2" NPT black iron gas line terminating 2-5/16" above the bottom of the appliance. The gas line may be installed from either side or from the rear of the appliance (see Figure 10).

4. Feed flexible gas line through one of three gas line conduit sleeve and repack insulation to cover any openings. Prepare the incoming gas line with teflon tape or pipe joint compound and hook-up incoming gas line to the flexible gas line.

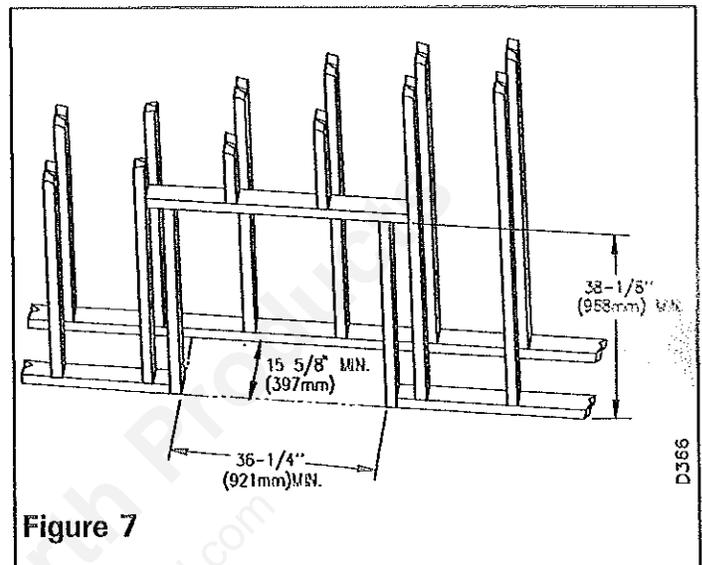


Figure 7

NOTE: If 1/2" NPT black iron pipe does not mate with fitting at the end of flexible gas line, remove fitting and replace with a 37 degree flare 3/4"-12, 1/2" NPT (female) fitting.

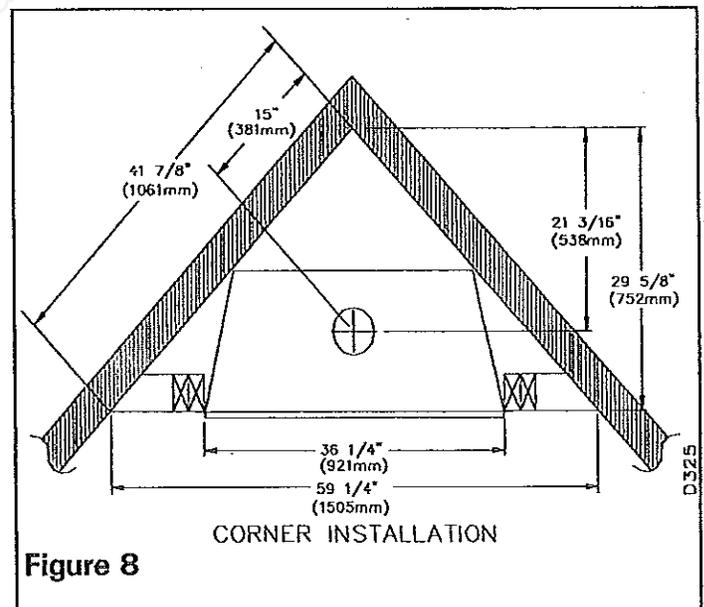


Figure 8

NOTE: When finishing appliance, **DO NOT OVERLAP COMBUSTIBLE MATERIAL ONTO THE BLACK FRONT FACE.** Brick, tile, or other non-combustible materials may be applied to the face provided that any gap is between the material used and the face is caulked with a non-combustible caulking.

GAS LINE HOOK-UP

GAS LINE HOOK-UP SHOULD BE DONE BY YOUR GAS SUPPLIER OR A QUALIFIED SERVICE PERSON.

NOTE: BEFORE YOU PROCEED MAKE SURE YOUR GAS SUPPLY IS OFF!

A manual shut-off valve has been included in the appliance's gas supply system. You may consider installing an extra gas shut-off valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 9.

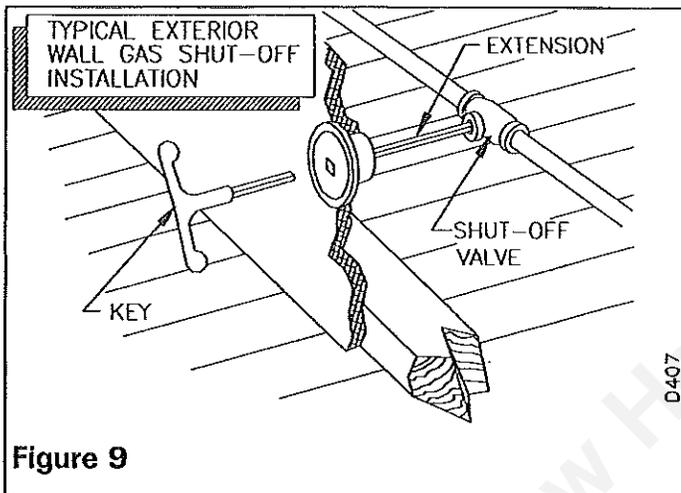


Figure 9

In conformance with local codes, route a 1/2" NPT GAS LINE towards the appliance coming in from any of the 3 directions shown in Figure 10.

CAUTION: DO NOT KINK FLEXIBLE GAS LINE!!

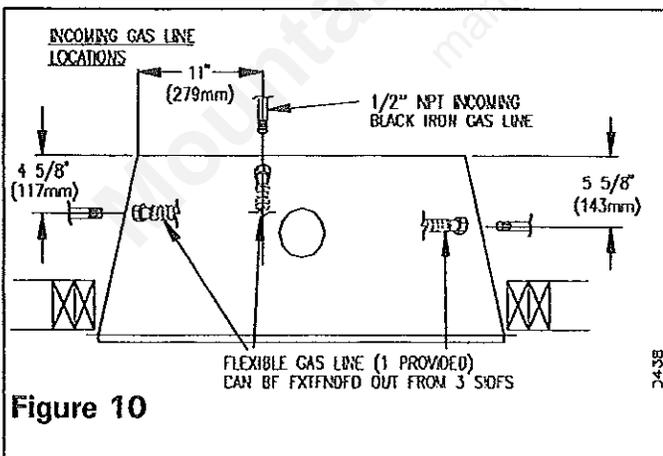


Figure 10

FMI recommends that a black iron gas line be routed from the gas source, through a sediment trap (shown in figure 11), and into the appliance. Once connected through the appliance, a flexible gas line may be used for ease of installation to gas control valve (See Figures 12 and 13).

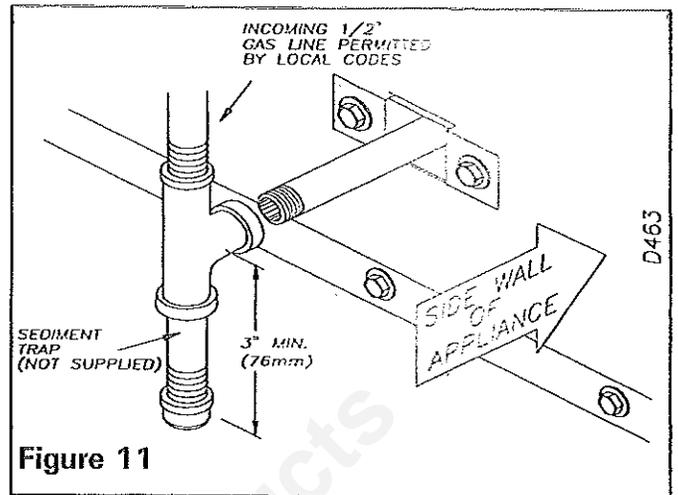


Figure 11

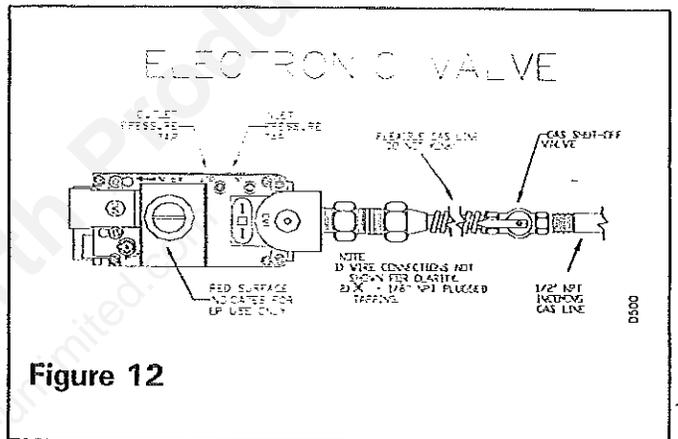


Figure 12

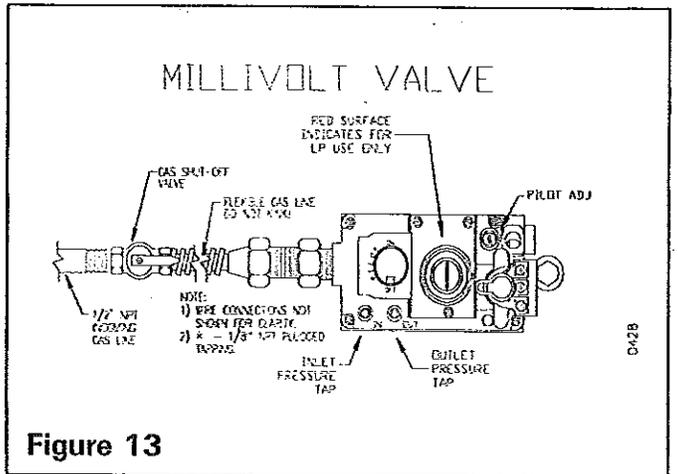


Figure 13

Before connecting the black iron gas line to the inside of the appliance a sediment trap must be included outside the appliance between the gas line and the gas shut-off valve. It must extend down three (3) inches beyond the center of the pipe. Prepare incoming black iron gas line with teflon tape or pipe joint compound (CHECK WITH LOCAL BUILDING CODES).

Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or Propane), and should not be applied lightly to ensure excess sealant does not enter the gas line.

B-TYPE VENT INSTALLATIONS

A B-type venting system must be connected to the appliance for venting to the outside of the building.

The following section is provided as a guide to a standard B-type vent installation.

Standing codes requirements concerning B-type vent installations may vary within your state, province or local codes jurisdiction. Therefore, it is recommended that you check with your local building codes for specific requirements or in absence of local codes, follow Section 7.0 of the current National Fuel Gas Code NFPA No. 54/ANSI Z223.1 and in Canada with CAN/CGA B149 for Category I systems using double wall B-1 vent pipe.

This gas appliance must be vented to the outdoors only and may not be terminated into an attic space or into a chimney flue servicing a solid-fuel burning appliance.

This appliance may be vented through a manufactured chimney system or a masonry chimney using a B-vent adapter or a chimney liner system if all are listed, inspected and approved by local codes and/or building authorities.

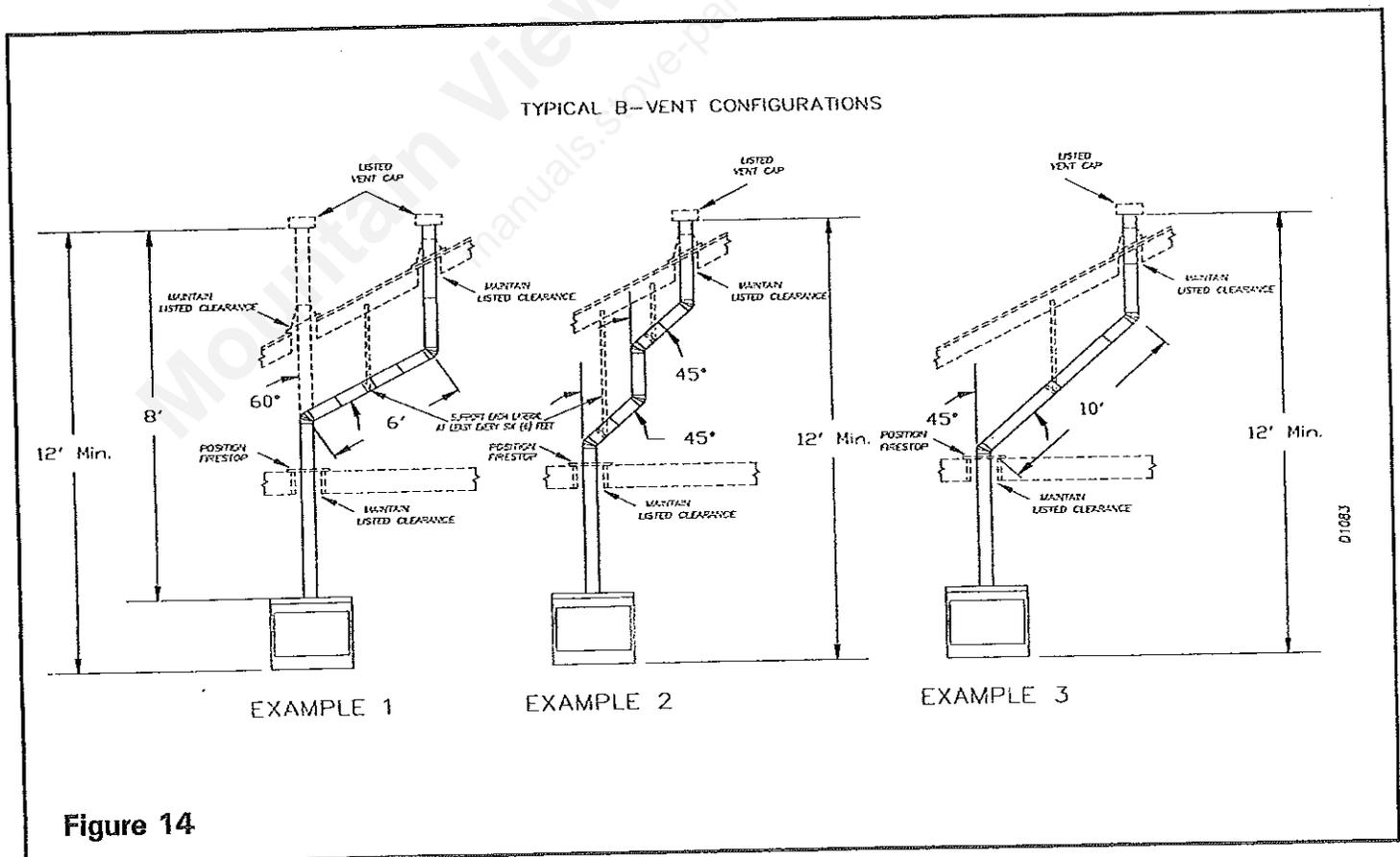
The examples shown in figure 14 are typical of most B-vent installations and codes practices.

Example 1: Shows the minimum allowable system height and lateral offset for a 60° degree or greater inclination. Code specifies that offsets at 60° degrees or greater are considered horizontal and must follow the 75% percent rule for lateral to total vertical system height. Codes also allows only one offset in the total system when at 60° degrees or greater. The total vertical height in this example represents the minimum height of 8 feet and therefore the allowable lateral is 6 feet when the 75% percent rule applies. If the lateral length must exceed 75% then the system must be sized in accordance with the Category I venting tables.

Example 2: Shows a multiple offset each at 45° degrees of inclination. Multiple offsets are permitted if they do not exceed 60° degrees of inclination. The total lengths of the two offsets are not required to meet the 75% percent allowable rule.

Example 3: Shows a single offset at 45° degrees of inclination and therefore the lateral length at 10 feet of offset does not have to meet the 75% percent rule.

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a sub-floor, ceiling joist or an attic overhang. The vent pipe must terminate vertically into a listed type vent cap and extend a sufficient height through an approved roof flashing, roof jack or a roof thimble. At all points the listed clearances must be maintained.



B-TYPE VENT INSTALLATIONS CONTINUED

Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54 or CAN/CGA B149. These rules apply to vents at 12 in. diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 ft. distance from a vertical wall or obstruction (see figure 15).

If venting horizontally through a side wall becomes necessary, a listed thimble approved for use with B-type vent must be used. Check with your local codes before venting through a side wall.

Some codes areas allow the use of existing B-type vent systems if the system is at or above the recommended diameter of the flue; in this case 5". The flue connection must be made using listed B-type connectors and the existing system must be code inspected for damage and proper installation.

It is not recommended that this appliance be common vented with an existing gas burning appliance. However, if it becomes necessary to common vent this appliance, the venting system must be sized and configured in accordance with the common venting guides Appendix G of the current National Fuel Gas Code NFPA No. 54/ANSI Z223.1 and in Canada with CAN/CGA B149.

NOTE: Before connecting this appliance to an existing vent system or a common venting system consult with your local architect, planner or building official.

This appliance must be properly connected to a venting system and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.

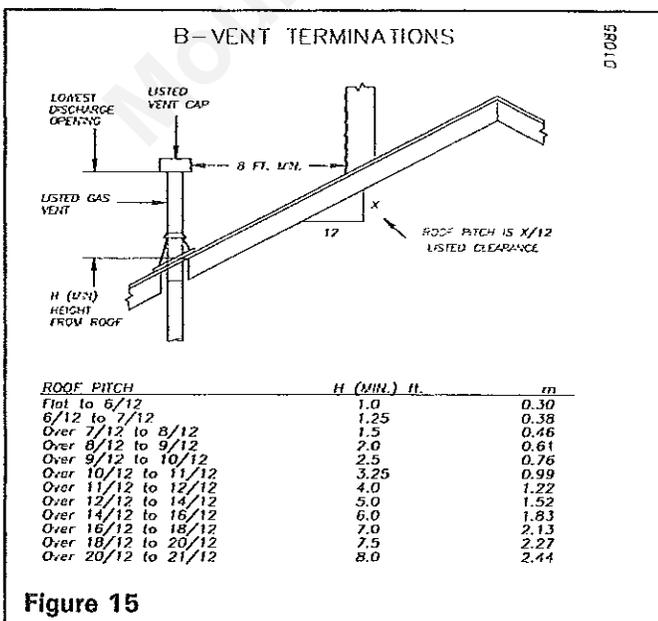
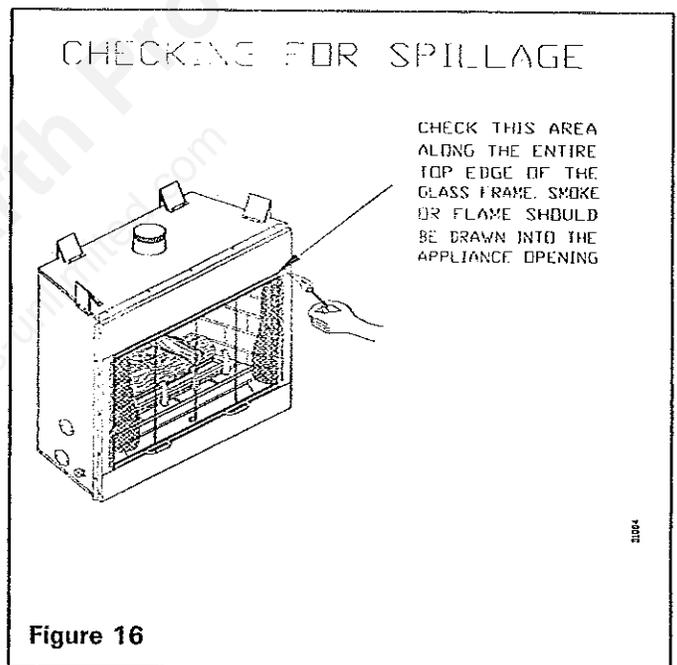


Figure 15

CHECKING FOR PROPER VENTING

After completing and checking the electrical, gas and vent connections, follow the lighting instructions and allow the main burner to run for approximately 5 minutes. Hold a lighted match or cigarette near the top edge of the window frame and play it along the entire length of the window (see figure 16). Proper venting should tend to draw the flame or smoke into the appliance. Improper venting or escaping of spillage of burned gas, is indicated when the match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance.

If the appliance is found to be improperly venting, shut it off and notify your installer or a qualified service agency to inspect the venting system.



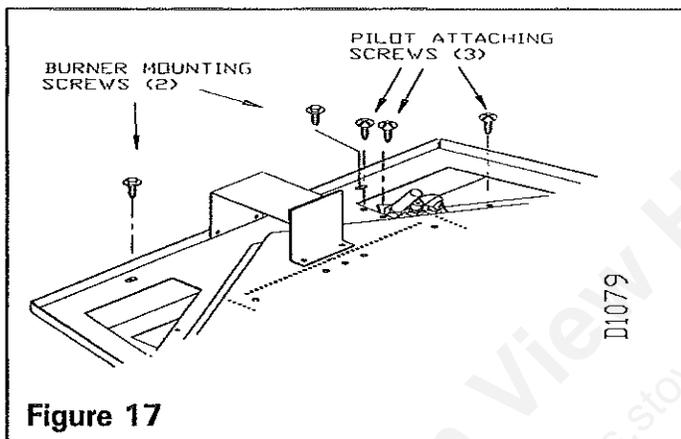
THIS APPLIANCE IS EQUIPPED WITH A VENT SAFETY SHUTOFF SWITCH WHICH WILL SHUT DOWN THE APPLIANCE IN THE CASE OF A VENTING PROBLEM. DO NOT BYPASS THE VENT SAFETY SWITCH. IF THE APPLIANCE SHOULD SHUT DOWN CONTACT A QUALIFIED INSTALLER, SERVICE AGENCY, OR YOUR GAS SUPPLIER TO HAVE THE VENT INSPECTED BEFORE OPERATING.

CAUTION: All gas piping and connections must be tested for leaks after the installation is completed. After ensuring that the gas valve is on, apply a soap and water solution to all connections and joints. If bubbles appear, leaks can be detected and corrected. **DO NOT USE AN OPEN FLAME FOR LEAK TESTING AND DO NOT OPERATE ANY APPLIANCE IF A LEAK IS DETECTED.**

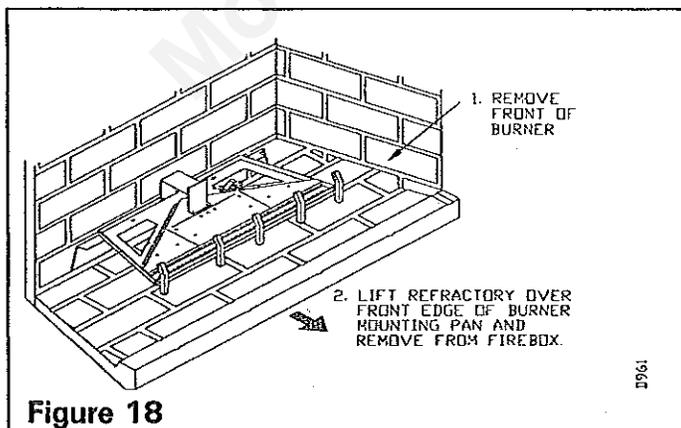
Complete your gas line installation by connecting incoming gas line to flexible gas line. Secure tightly with a wrench but **DO NOT OVER TIGHTEN.**

GAS BURNER SUPPLY HOOK-UP

1. Disconnect the burner from the burner mounting flange by removing two screws (see Figure 14).
2. Disconnect the pilot from the burner by removing three screws holding the pilot mounting bracket (see Figure 17).



3. Rotate the back of the burner forward and lift out of the firebox. **DO NOT DAMAGE PILOT & GAS LINE**
4. Remove the bottom refractory by lifting and sliding out the front (see Figure 18).



NOTE: Do not kink or damage the flex line connector.

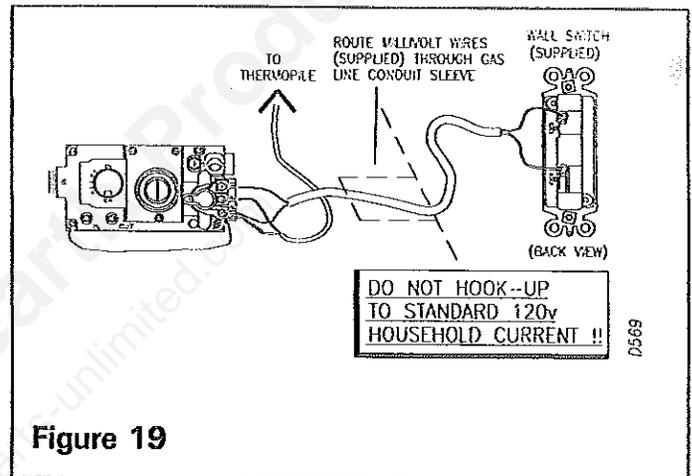
5. Remove the hearth pan with controls intact by removing two screws at either side of the pan.

6. Follow steps 1,2,3,4 & 5 in reverse order to reinstall burner assembly.

WALL SWITCH INSTALLATION (GL851N/P)

The installation of a wall switch allows you to activate the gas control valve without the normal household electricity since the valve operates on millivolt current supplied by the heat generated by the thermopile

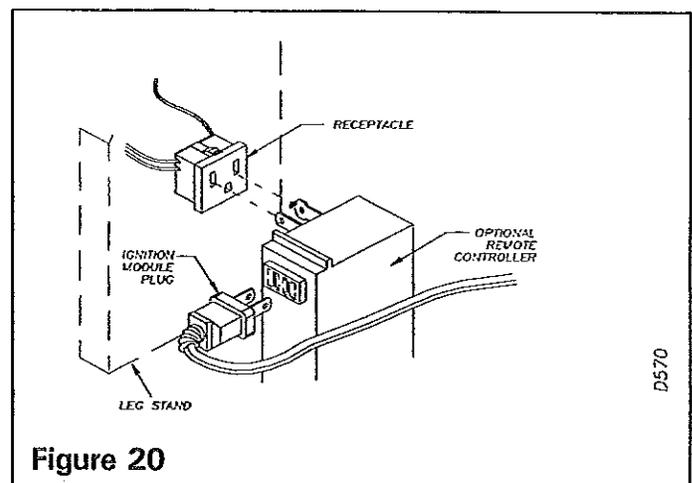
1. Remove the control access door panel. See figure 1.
 2. Connect the 18 GA. wires (Provided with wall switch kit) from the gas control valve to the wall switch as shown in Figure 19.
- NOTE:** If any of the original wire from the unit control must be replaced, use the same type or a higher rated wire (25 ft. maximum length).



CAUTION: DO NOT WIRE REMOTE WALL SWITCH TO MAIN POWER SUPPLY.

ELECTRICAL HOOK-UP (GL851EN/EP)

1. Remove the cover plate and locate the electrical wires.
2. Using 18ga. wires and the wall switch provided, proceed to connect to 120vac regular household current per Figure 20, and refer to the wiring diagram on page 15 of this manual.



PILOT BURNER ADJUSTMENT

Turn the adjustment screw marked pilot clockwise to decrease or counterclockwise to increase the flame to proper size (see figures 21 and 22).

Do not remove the adjustment screw.

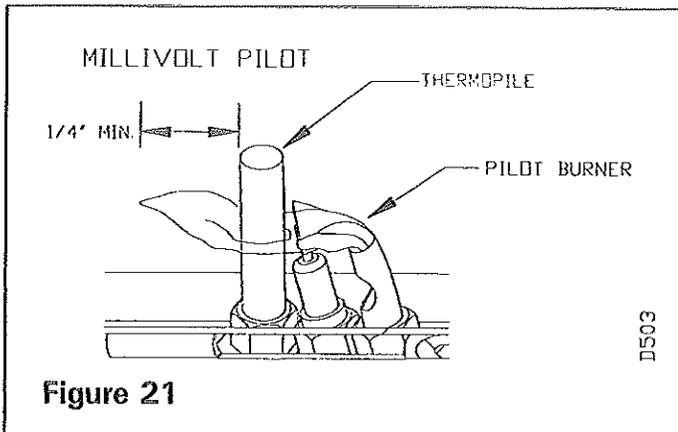


Figure 21

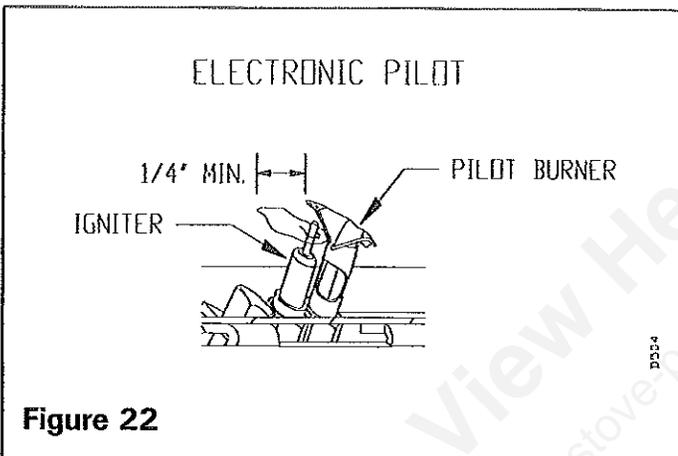


Figure 22

BURNER FLAME ADJUSTMENT

The main burner flame should be a blue flame somewhere between a long blue flame and a short, sharp flame that tends to blow off the ports. If flame is short, very sharp or blowing, the burner air shutter should be closed enough to obtain a long blue flame (see below). Long yellow flame produce excess carbon monoxide and could cause sooting.

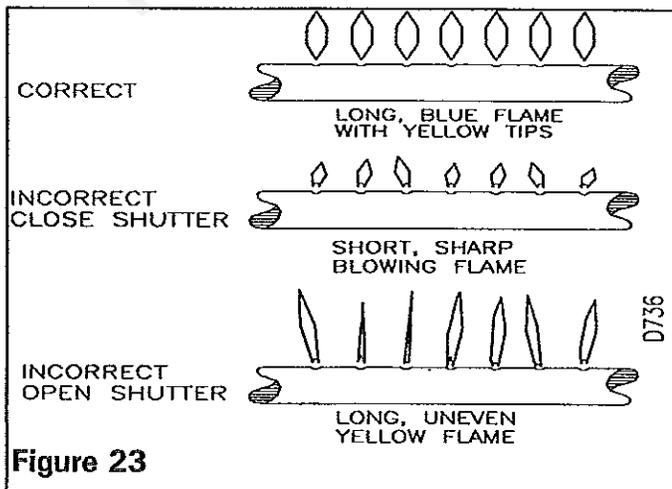


Figure 23

TO SHUT OFF

1. For temporary shut-off, turn off remote control wall switch. Pilot burner will remain lit, ready for return to ON.
2. For long term shut-off, depress the gas valve cock valve, located under the firebox, turn clockwise to the OFF position.

LOG & EMBER PLACEMENT

Position the rear log on the support bracket welded to the back of the burner. The one-piece lower log is placed with the smaller section to the rear of the burner and resting onto the bracket. The two smaller logs are placed at an angle as shown in Figure 24.

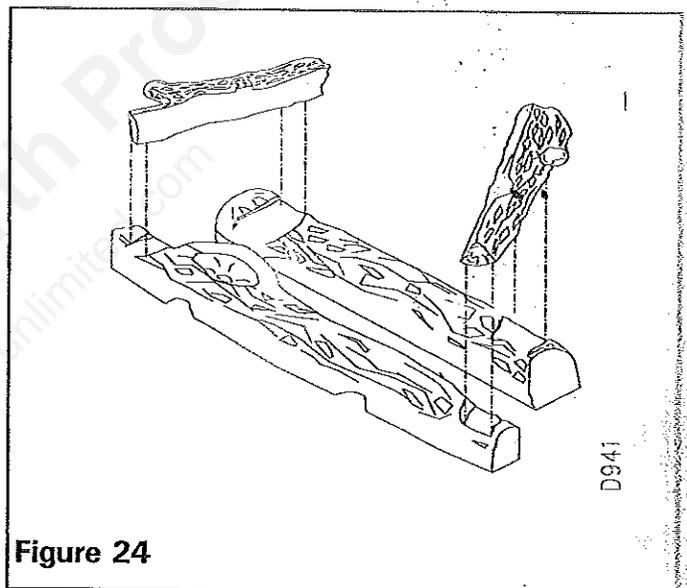


Figure 24

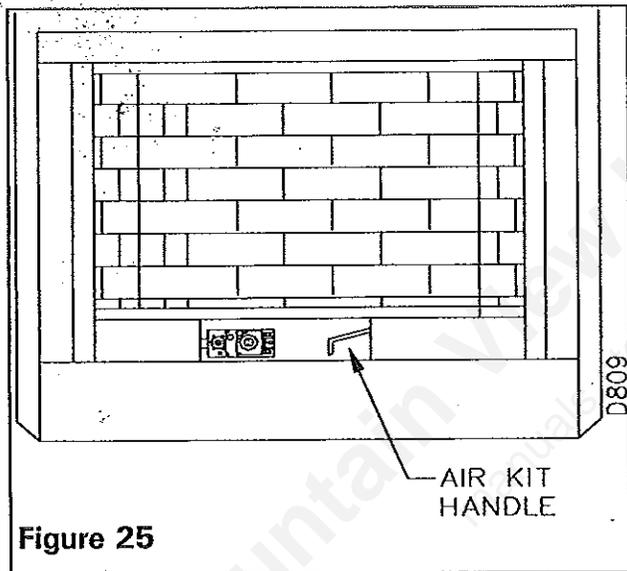
Next remove the ceramic fiber embers from the bag and flatten small amounts into pieces about the size of a dime. Place the pieces loosely onto the exposed section of the burner ember tray, which is located on the very front of the burner grate. This will create the glowing appearance as the flame touches the ember material. Do not block burner ports by using too much ember material in one area. Sprinkle a small amount of vermiculite provided in the separate bag over the embers to complete the effect. It is not necessary to use all of the ember or vermiculite materials provided.

To enhance the look of the hearth you may optionally place the lava rock provided around the front and sides of the burner. When finished replace the glass door see Glass Door Replacement on page 11.

NOTICE: Do not put lava rock on top or under the burner. Placing lava rock on the burner could cause performance problems.

OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS

1. Upon completing your gas line connection, a small amount of air will be in the lines. When first lighting the appliance it will take the appliance a few minutes to purge the air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lighting of the appliance will not require such purging.
1. When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to the "curing" of the logs and "burn-in" of internal paints and lubricants used in the manufacturing process.
2. Keep control compartment, logs burners, and area surrounding the logs clean by vacuuming or brushing at least twice a year. Do not vacuum the mineral wool located in the front of the burner assembly.
3. Always turn off gas to pilot before cleaning. For example, relighting, refer to the lighting instructions.



4. A qualified field service technician should inspect the appliance and venting system before use or at least annually.

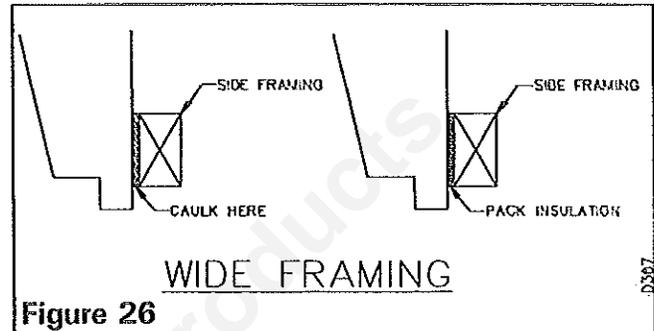
CAUTION: THE LOGS CAN GET VERY HOT HANDLE ONLY WHEN COOL.

5. Always keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
6. Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.
7. Never leave children unattended when the appliance is operating.

MAINTENANCE

IMPORTANT: Turn off gas and electrical power before servicing appliance. It is recommended that a qualified serviceman perform these checkups at the beginning of each heating season.

In order to properly clean the burner and pilot assembly remove the logs exposing the burner and pilot assembly.



CLEANING BURNER AND PILOT

Clean all foreign materials from the top of burner and from bottom panel below. Check to make sure that burner orifice is clean. Visually inspect pilot. Brush or blow away any dust and lint accumulations. If pilot orifice is plugged, disassembly maybe required to remove any foreign materials from orifice and/or tubing. When appliance is put back in service, check pilot flame patterns (See Figure 21,22).

OPTIONAL EQUIPMENT'S COMBUSTION AIR KIT MODEL AK-GI

The outside air kit may be installed on the right side of the fireplace only. The vent can be installed through the outside wall or a ventilated crawl space. The handle to operate the damper door for the outside air inlet will be located behind the burner valve access door when the kit is installed (See Figure 25). Pull the handle to open or push to close.

**CAUTION: AIR INLET DUCTS ARE NOT TO
TERMINATE IN ATTIC SPACE.**

APPLIANCE ENCLOSURE

Before finishing the enclosure around the appliance, inspect all joints around the outer surround. Any gaps between the nailing flanges and the framing should be sealed with non-combustible insulation or caulking. If the appliance is mounted on a raised platform, it must be a continuous surface and not on blocks without a solid surface. This will prevent the entry of cold air by means of conduction through the total bottom of the appliance. (See Figure 26).

GLASS DOOR REMOVAL

To remove, hold the glass door firmly at handles and evenly push straight up until bottom pins are free from location slots (See Figure 27). Slightly swing door towards you. At this point, while maintaining glass door secured at one handle, grasp the side of glass panel for better grip and slightly pull glass door down to free top pins from spring clips.

Note: Glass door may be heavy for some individuals. If this is the case, please request help from someone else.

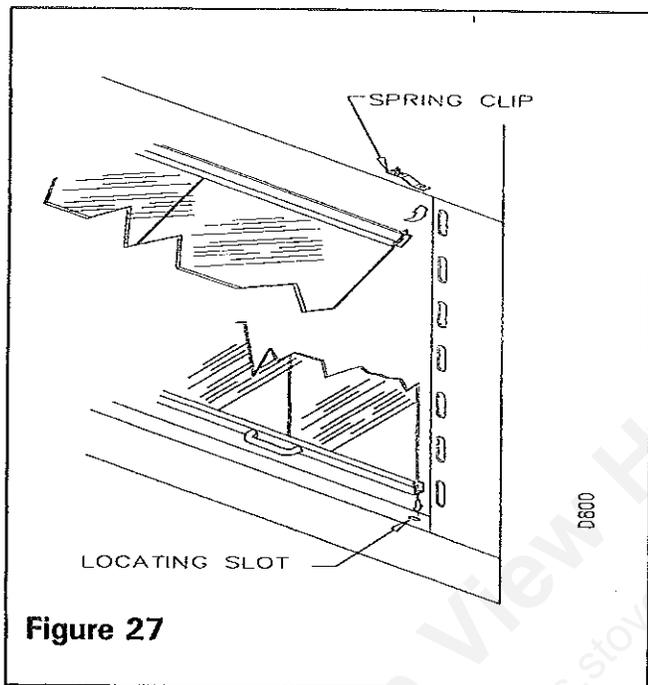


Figure 27

FOR USE WITH GLASS DOORS CERTIFIED WITH THE APPLIANCE ONLY.

GLASS DOOR REPLACEMENT

To replace, insert top door pins into spring clips located on the top face. Make sure pins are properly secured to the clips. As you hold top portion in place, swing bottom of door towards bottom face until the bottom door pins clear the flange and then insert the lower pins into the locating slots until seated (See Figure 27).

Note: some adjustment maybe required in order to align door pins to clip (top) and locating slots (bottom). This can be done by loosening the screw securing both spring clip and pivot plate and sliding it to the proper location.

Instructions for the installation of the gas kit are included with the glass door package. Use of any other glass door assembly not tested with the GL851 series models may constitute a fire hazard and will void the FMI warranty. Please read and follow the maintenance instructions for your glass doors as outlined below.

- * Never use an abrasive material to clean the glass. Use a rag and a liquid cleaner.
- * Never clean the glass while they are hot.
- * Always operate the appliance with the glass door in place.

(If the glass is left off the unit while operating hot combustion gas may enter the room)

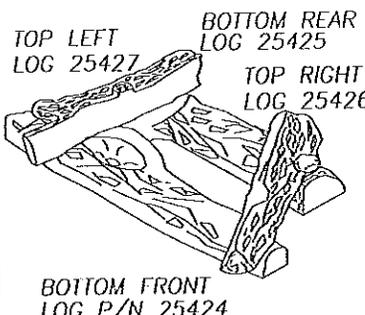
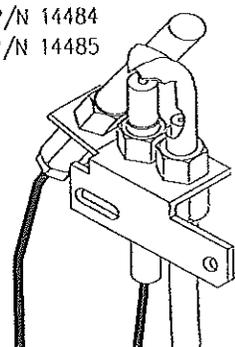
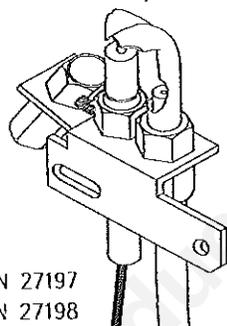
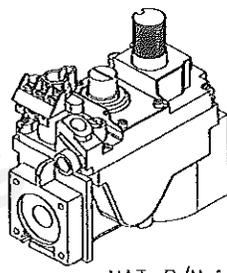
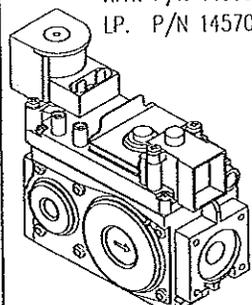
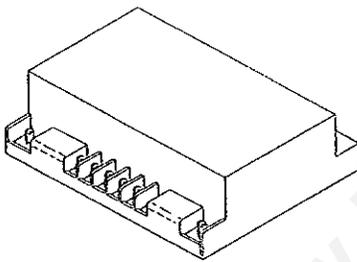
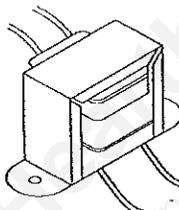
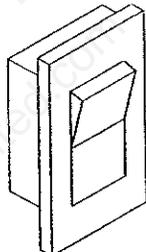
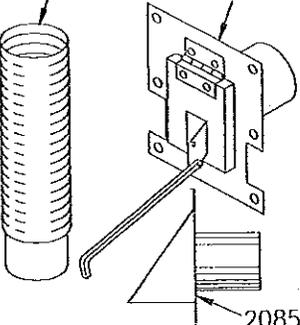
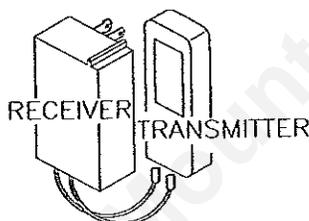
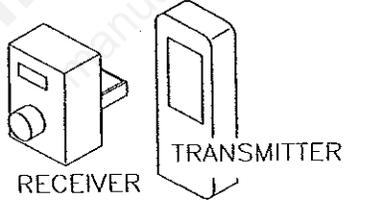
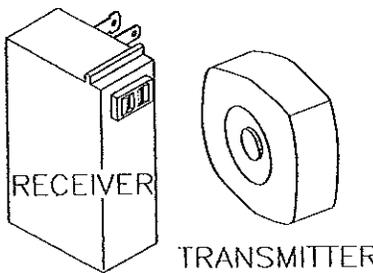
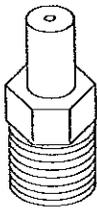
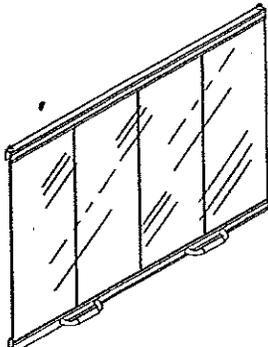
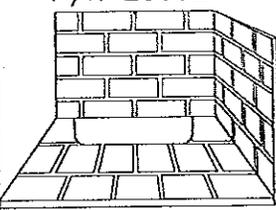
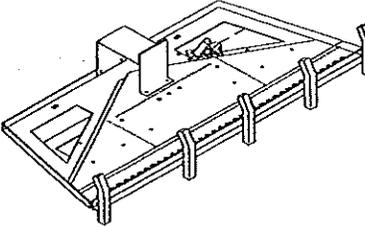
CAUTION: DO NOT OPERATE THE APPLIANCE WITH THE GLASS DOOR REMOVED.

NOTE: Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding, etc. It is imperative that the control compartments, burners, and circulating air system be kept clean.

WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

- * When ordering replacement or accessory items please have your appliance's model name or number and the part number of the item (s) you are ordering ready. The model name or number for your particular appliance may be found on the rating plate located inside the appliance
- * Refer to the parts list and diagrams when ordering replacement parts for your appliance.
- * Repair parts or accessory items may be bought from your local representative.
- * All product specifications are subject to change without notice.

ACCESSORIES & REPLACEMENT PARTS

<p>LOG SET ASSY. (FIBER) P/N 24586</p> <p>TOP LEFT LOG 25427 TOP RIGHT LOG 25426 BOTTOM REAR LOG 25425 BOTTOM FRONT LOG P/N 25424</p> 	<p>PILOT ASSEMBLY (MILLIVOLT) NAT. P/N 14484 LP. P/N 14485</p> 	<p>PILOT ASSEMBLY (ELECTRONIC) NAT. P/N 27197 LP. P/N 27198</p> 	<p>MILLIVOLT VALVE NAT. P/N 14512 LP. P/N 14513</p> 	
<p>ELECTRONIC VALVE NAT. P/N 14569 LP. P/N 14570</p> 	<p>IGNITION MODULE SP745 P/N 14301</p> 	<p>TRANSFORMER P/N 14129</p> 	<p>WALL SWITCH KIT P/N 22180</p> 	<p>AIR KIT P/N 90325 17343 21132 20858</p> 
<p>OPTIONAL REMOTE CONTROL (MILLIVOLT ONLY) BATTERY REQUIRED FOR TRANSMITTER.</p> <p>RECEIVER TRANSMITTER</p> <p>KIT P/N 01026</p> 	<p>OPTIONAL REMOTE CONTROL (MILLIVOLT ONLY). BATTERIES REQUIRED FOR RECEIVER AND TRANSMITTER.</p> <p>RECEIVER TRANSMITTER</p> <p>KIT P/N 00825</p> 	<p>OPTIONAL REMOTE CONTROL</p> <p>RECEIVER TRANSMITTER</p> <p>KIT P/N 00710</p> 	<p>ORIFICE NAT. P/N 23099 LP. P/N 23773</p> 	
<p>FIXED DOOR ACCESS</p> <p>DFXGLB P/N 01605</p> 	<p>BACK REFRACTORY P/N 20938</p> <p>SIDE REFRACTORY P/N 20939 (LEFT AND RIGHT)</p> <p>BOTTOM REFRACTORY P/N 20937</p> 	<p>BURNER ASSEMBLY P/N 23414</p> 		

Innovative Earth Products, -866-328-4537
AZ Fireplace -602-343-1000

MILLIVOLT SYSTEM

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lit by hand (manually). When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor, for some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- * Do not try to light any appliance.
- * Do not touch any electrical switch; do not use any phone in the building.
- * Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions.

* If you cannot reach your supplier, call the fire department.

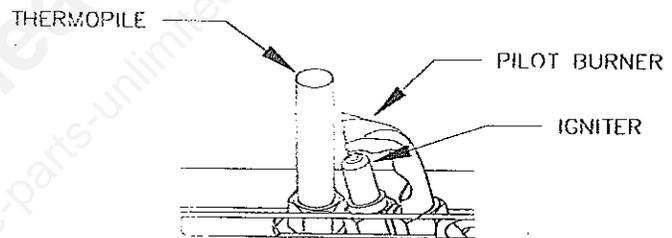
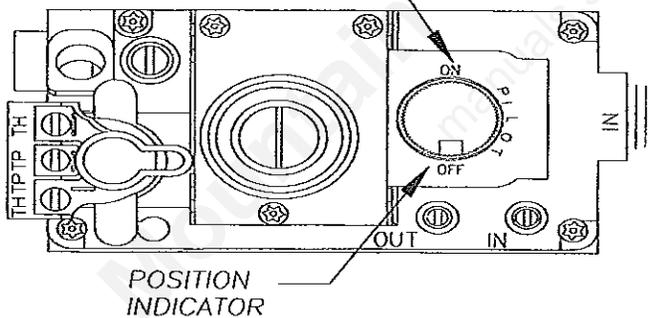
C. Use only your hands to push in or turn knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Forced or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any gas control which has been submerged.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label before proceeding.
2. Turn wall switch to the "OFF" position.
3. Turn off all electrical power to the appliance.
4. Remove the glass door.
5. Open control access panel.
6. Turn gas control knob clockwise to "OFF".

GAS CONTROL KNOB



6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.

7. Turn knob on gas control counterclockwise to "PILOT"
8. Push in the control knob all the way and hold in. Immediately light the pilot manually. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
9. Turn gas control knob counterclockwise to "ON". Knob can be turned to "ON" only if the control knob is popped out.
10. Close control access panel
11. Replace the glass door.
12. Turn on all electric power to the appliance.

TO TURN OFF GAS TO APPLIANCE

1. Turn off the wall switch.
2. Turn off all electric power to the appliance if service is to be performed.
3. Remove the glass door.
4. Open control access panel.
5. Turn gas control knob clockwise to "OFF" Do not force.
6. Close control access panel.
7. Replace the glass door.

D1081

ELECTRONIC IGNITION SYSTEM

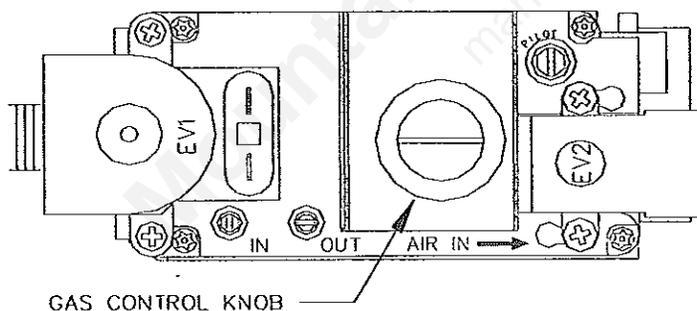
FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. When lighting the pilot, follow these instructions exactly.
- B. BEFORE turning "ON", smell around the appliance for gas. Be sure to smell next to the floor, some gases are heavier than air and will settle on the floor.
WHAT TO DO IF YOU SMELL GAS
 - * Do not try to light any appliance.
 - * Do not touch any electrical switches. Do not use any phones in the building.
 - * Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions.
- * If you cannot reach your supplier, call the fire department
- C. Use only your hands to turn the "ON/OFF" lever. Never use tools. If the lever will not turn, don't try to repair. Call a qualified service technician. Forced or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any gas controls which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label before proceeding.
2. Set the thermostat to lowest setting. (if applicable)
3. Turn off wall switch and all electrical power to the appliance.
4. This appliance is equipped with an ignition device which automatically light the pilot. **DO NOT** try to light the pilot by hand.
5. Remove the glass door and open the control access panel.
6. Turn the manual gas shutoff valve to the OFF position.
7. Wait five (5) minutes. to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label.
8. Turn the manual gas shutoff valve to the ON position.
9. Turn the main burner wall switch to the ON position for ignition.
10. Close the control access panel and replace the glass door.
11. If the burner will not stay lit after several tries, turn the gas control lever to "OFF" and call your service technician or gas supplier.



If remote control is installed, point transmitter at the appliance, press and hold down the button for three (3) seconds.

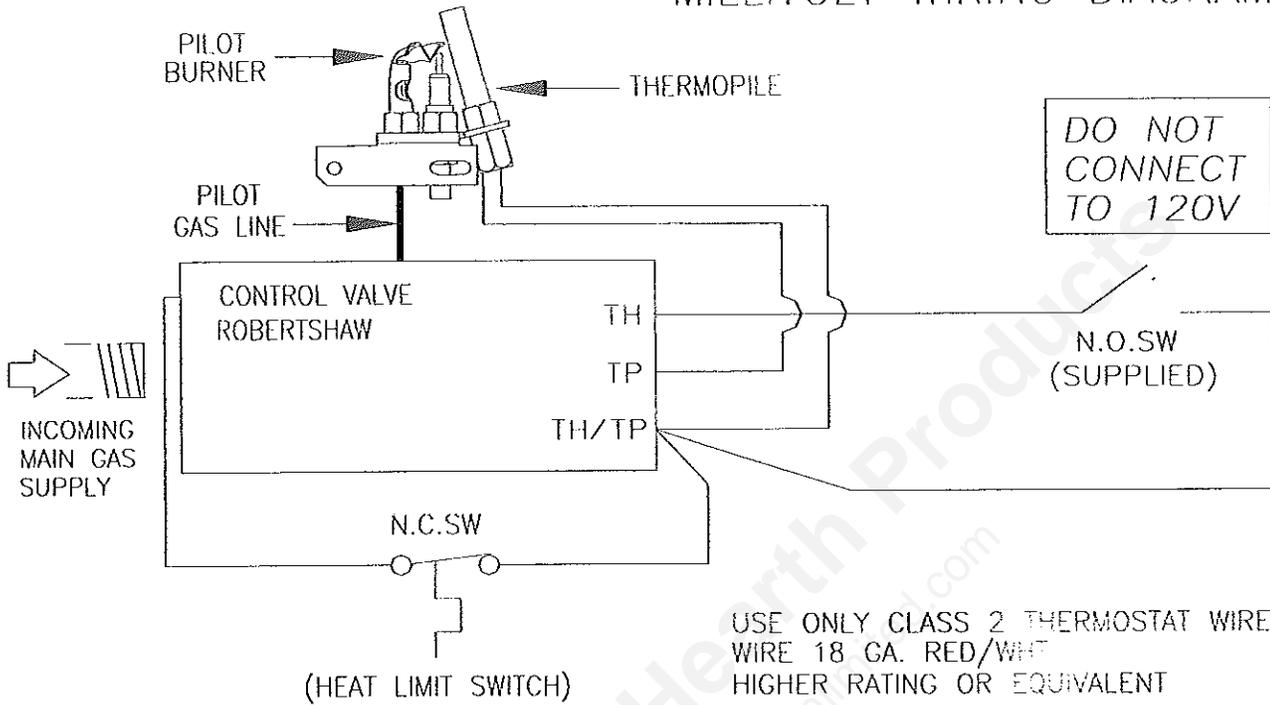
TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch.
2. Turn off all electrical power to appliance if service is to be performed.
3. Remove the glass door.
4. Remove control access panel or louver.
5. Turn the manual shutoff valve to the OFF position.
5. Replace the glass door.

D1082

MILLIVOLT WIRING DIAGRAM

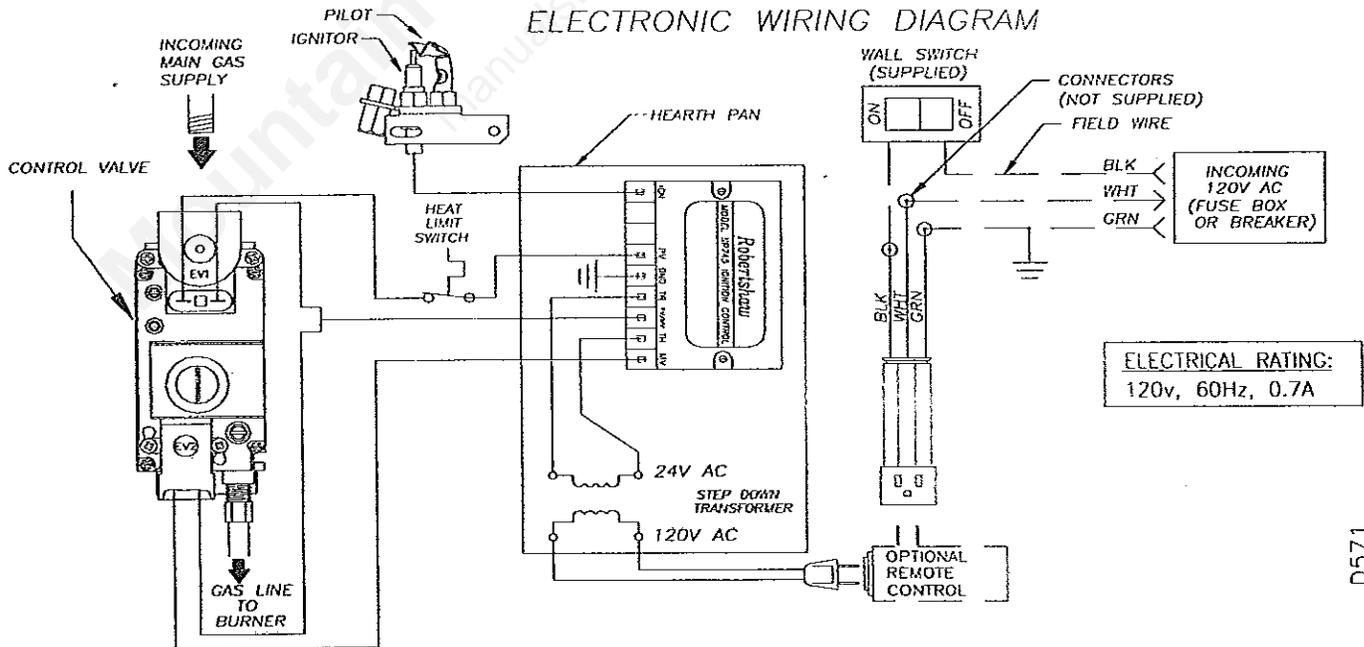
MILLIVOLT WIRING DIAGRAM



D572

ELECTRONIC WIRING DIAGRAM

ELECTRONIC WIRING DIAGRAM



D571

MILLIVOLT SYSTEM TROUBLESHOOTING GUIDE

FOR GL851N/P VENTED DECORATIVE GAS APPLIANCE

THE TWO MOST COMMON CAUSES OF A MALFUNCTIONING GAS APPLIANCE ARE:

1. LOOSE WIRING CONNECTIONS
2. CONSTRUCTIONS DEBRIS CLOGGING THE PILOT AND/OR GAS CONTROL VALVE FILTER.

NOTE: BEFORE TROUBLESHOOTING THE SYSTEM, MAKE SURE THE GAS SHUT-OFF VALVE IS OPEN.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. PILOT WILL NOT LIGHT.	1a. NO GAS SUPPLY, OR SHUT-OFF VALVE IS OFF. 1b. AIR IN GAS LINE. 1c. CONSTRUCTION DEBRIS CLOGGING PILOT ORIFICE. 1d. LOW GAS PRESSURE. 1e. CONTROL VALVE KNOB IS NOT ON THE "PILOT" POSITION. 1f. KINKED PILOT LINE 1g. BAD VALVE.	A. CHECK TO SEE IF YOU HAVE GAS SUPPLY. B. HOLD REGULATOR CONTROL VALVE IN THE "PILOT" POSITION FOR 2 OR 3 MINUTES TO PURGE AIR. IF YOU SMELL GAS STOP AND WAIT FOR A FEW MINUTES BEFORE TRYING TO LIGHT THE FIREPLACE. C. REMOVE DEBRIS AND DIRT, INSPECT AND CLEAN ANY OTHER POSSIBLE OBSTRUCTIONS. D. CONTACT YOUR GAS SUPPLIER. E. REFER TO SECTION ON PILOT LIGHTING. F. HAVE A QUALIFIED TECHNICIAN REPLACE PILOT LINE. G. REPLACE REGULATOR VALVE (REFER TO REPLACEMENT PARTS LIST).
2. PILOT WILL NOT STAY LIT	2a. LOOSE WIRING ON THERMOPILE TO REGULATOR VALVE - NO MILLIVOLT CURRENT IS BEING SENT BACK TO REGULATOR. 2b. IF VALVE KNOB AND WALL SWITCH ARE IN THE "ON" POSITION-PROBABLE DEFECTIVE REGULATOR VALVE.	A. CHECK WIRING CONNECTIONS. REFER TO WIRING DIAGRAM B. HAVE A QUALIFIED TECHNICIAN REPLACE VALVE.
3. NO GAS TO BURNER, ALTHOUGH WALL SWITCH AND VALVE ARE SET TO THE "ON" POSITION.	3a. WALL SWITCH WIRES DEFECTIVE. 3b. POWERPLYE GENERATOR OR SENSOR NOT GENERATING SUFFICIENT VOLTAGE	A. CHECK ELECTRICAL CONNECTIONS. B. RE-CHECK PROBLEM #2.
4. FREQUENT PILOT OUTAGE.	4a. PILOT FLAME MAY BE TOO LOW, CAUSING SAFETY PILOT TO "DROP OUT"	A. CLEAN AND ADJUST PILOT FLAME FOR MAXIMUM FLAME IMPINGEMENT ON THERMOPILE.
5. PILOT GOES OUT WHEN WALL SWITCH IS ON.	5a. MILLIVOLT OUTPUT ON THERMOPILE TOO HIGH.	A. REPLACE THERMOPILE

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
<p>6. SPARK IGNITOR WILL NOT LIGHT PILOT AFTER REPEATED TRIGGERING OF RED BUTTON.</p>	<p>6a. DEFECTIVE IGNITOR (NO SPARK AT ELECTRODE).</p> <p>6b. DEFECTIVE PILOT OR MISALIGNED ELECTRODE AT PILOT (SPARK AT ELECTRODE).</p> <p>6c. NO GAS OR LOW GAS PRESSURE.</p> <p>6d. NO L.P. IN TANK.</p>	<p>A. CHECK FOR SPARK AT THE ELECTRODE AND PILOT; IF NO SPARK AND ELECTRODE WIRE IS PROPERLY CONNECTED, REPLACE IGNITOR..</p> <p>B. USING A MATCH, LIGHT PILOT. IF PILOT LIGHTS, TURN OFF PILOT AND TRIGGER THE RED BUTTON AGAIN. IF PILOT LIGHTS, AN IMPROPER GAS/AIR MIXTURE CAUSED THE IMPROPER LIGHTING AND A LONGER PURGE PERIOD IS RECOMMENDED. IF PILOT WILL NOT LIGHT – CHECK GAP AT ELECTRODE AND PILOT – SHOULD BE 1/8 INCH TO HAVE A STRONG SPARK. IF OK, REPLACE PILOT.</p> <p>C. CHECK REMOTE SHUT OFF VALVES FROM FIREPLACE. USUALLY THERE IS A VALVE NEAR THE FIREPLACE AND SOMETIMES THERE IS A VALVE NEAR THE MAIN. THERE CAN BE MORE THAN ONE (1) VALVE BETWEEN THE FIREPLACE AND MAIN.</p> <p>Ca. LOW PRESSURE CAN BE CAUSED BY A VARIETY OF SITUATIONS SUCH AS BENT LINE, TOO NARROW DIAMETER OF PIPE OR EVEN LOW LINE PRESSURE. CHECK FOR KINKED LINES. IF NONE, CONSULT WITH PLUMBER OR GAS SUPPLIER.</p> <p>D. CHECK L.P. (PROPANE). YOU MAY BE OUT OF FUEL.</p>

ELECTRONIC IGNITION TROUBLESHOOTING GUIDE

FOR GL851EN/EP VENTED DECORATIVE GAS APPLIANCE

THE TWO MOST COMMON CAUSES OF A MALFUNCTIONING GAS APPLIANCE ARE:

1. LOOSE WIRING CONNECTIONS
2. CONSTRUCTIONS DEBRIS CLOGGING THE PILOT AND/OR GAS CONTROL VALVE FILTER.

NOTE: BEFORE TROUBLESHOOTING THE SYSTEM, MAKE SURE THE POWER IS ON AND THE GAS SHUT-OFF VALVE IS OPEN.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. IGNITOR WILL NOT SPARK OR PILOT WILL NOT LIGHT	1a. NO GAS SUPPLY, OR SHUT-OFF VALVE IS OFF. 1b. AIR IN GAS LINE. 1c. CONSTRUCTION DEBRIS CLOGGING PILOT ORIFICE. 1d. LOW GAS PRESSURE. 1e. KINKED PILOT LINE 1f. CONTROL VALVE IS NOT OPENING. 1g. NO POWER TO UNIT OR THE IGNITION MODULE OR POWER TRANSFORMER IS BAD.	A. CHECK TO SEE THAT YOU HAVE GAS SUPPLY AND THAT THE MANUAL SHUTOFF VALVE IS OPENED. B. REPEAT LIGHTING PROCEDURE SEVERAL TIMES TO PURGE ALL AIR OUT OF LINES. IF AFTER REPEATED ATTEMPTS APPLIANCE DOES NOT LIGHT CALL FOR QUALIFIED SERVICE AND REPAIR. C. REMOVE DEBRIS AND DIRT, INSPECT AND CLEAN ANY OTHER POSSIBLE OBSTRUCTIONS. D. CONTACT YOUR GAS SUPPLIER TO CHECK PRESSURE. E. HAVE A QUALIFIED TECHNICIAN REPLACE PILOT LINE. F. REPLACE CONTROL VALVE (REFER TO REPLACEMENT PARTS LIST). G. CHECK THAT MAIN POWER IS ON AND THAT ALL WIRE CONNECTIONS ARE MADE CORRECTLY TO THE IGNITION MODEL (SEE WIRING DIAGRAM) - CHECK FOR 24 VAC AT THE SECONDARY SIDE OF THE TRANSFORMER. IF 24 VAC IS PRESENT AND THE MODULE DOES NOT OPERATE, HAVE THE MODULE REPLACED OTHERWISE HAVE THE TRANSFORMER REPLACED.
2. PILOT LIGHTS BUT WILL NOT STAY LIT	2a. LOOSE WIRING ON IGNITOR WIRE TO IGNITION MODULE - POOR GROUND TO IGNITION MODULE. 2b. PILOT FLAME TOO LOW TO SENSE	A. CHECK IGNITOR WIRE CONNECTION. REFER TO WIRING DIAGRAM - CHECK GROUND WIRE TO IGNITION MODULE. B. CLEAN AND ADJUST PILOT BURNER - CHECK GAS SUPPLY AND INLET PRESSURE TO UNIT. HAVE A QUALIFIED TECHNICIAN REPLACE PILOT ASSEMBLY IF BROKEN OR CORRODED.
3. NO GAS TO MAIN BURNER, ALTHOUGH WALL SWITCH AND VALVE ARE SET TO THE "ON" POSITION.	3a. WALL SWITCH WIRES DEFECTIVE. 3b. SENSOR, VALVE OR IGNITION MODULE IS NOT OPERATING.	A. CHECK ELECTRICAL CONNECTIONS. B. RE-CHECK PROBLEMS #1 AND 2.
4. FREQUENT MAIN BURNER OUTAGE.	4a. PILOT FLAME MAY BE TOO LOW, CAUSING SAFETY PILOT TO "DROP OUT". 4b. VENT MAY BE BLOCKED OR RESTRICTED.	A. CLEAN AND ADJUST PILOT FLAME FOR MAXIMUM FLAME IMPINGEMENT ON SENSOR. B. HAVE VENT INSPECTED FOR BLOCKAGE OR DAMAGE.

FIREPLACE MANUFACTURERS, INC.
GAS APPLIANCE
LIMITED 2 YEAR WARRANTY

THE WARRANTY

Fireplace Manufacturers, Inc., (hereafter referred to as FMI), warrants the FMI Gas Appliance to be free from defects in materials and workmanship at the time of manufacture.

REMEDY AND EXCLUSIONS

The coverage of this Warranty is limited to all components of the gas appliance manufactured by FMI, with the exception of glass and refractory. The glass is warranted for 90 days. There will be no cost for replacement of glass within 90 days of installation, provided that breakage is due to heat from the appliance. We do not warranty breakage occurring during installation or transportation.

If the decorative gas appliance covered by this Warranty is found to be defective within one year from the date of installation, FMI will, at its option, replace or repair defective components of the decorative gas appliance manufactured by FMI at no charge, or will pay for reasonable costs incurred in replacing or repairing such components. These charges should be pre-approved by FMI before any work is done. During the second year of the Warranty, FMI shall supply replacement parts, if readily available, at the current minimum wholesale price. FMI will not be responsible for any other expense.

REFRACTORY WARRANTY (IF APPLICABLE)

FIRST YEAR FMI warrants the refractory (except for hairline cracks less than 1/16" in width), one year from the date of manufacture to be free from defect in material and workmanship. If the original owner of an FMI fireplace believes that any of the refractory parts have failed during the above one year period, he/she should notify the nearest (FMI) distributor or dealer. FMI will pay for the refractory replacement and reasonable labor charges. FMI will be responsible for the freight charges.

SECOND YEAR FMI will supply refractory replacement parts at the current list price that is in effect at time of replacement. FMI will assume no responsibility for any labor or freight charges incurred.

This Warranty covers only parts and labor as provided above. In no case shall FMI be responsible for materials, components, or construction which are not manufactured or supplied by FMI. FMI will not be responsible for any labor charges to remove such materials, components, or construction. All replacement parts will be shipped F.O.B., Santa Ana, to purchasers' address or the nearest FMI distributor.

QUALIFICATIONS TO THE WARRANTY

The decorative gas appliance Warranty outlined above is further subject to the following qualifications:

1. The gas appliance must be installed as per the FMI installation instructions and local building codes. The use of components manufactured by others with this FMI gas appliance, (except for the Type B venting system as outlined in the installation instructions, if applicable), could create serious safety hazards, may result in denial of certification by recognized national safety agencies, and could be in violation of local building codes. This Warranty does not cover any damages occurring from the use of any components not manufactured or supplied by FMI.

2. THE FMI APPLIANCE MUST BE SUBJECTED TO NORMAL USE. THE DECORATIVE GAS APPLIANCES ARE DESIGNED TO BURN EITHER NATURAL OR PROPANE GAS ONLY. BURNING CONVENTIONAL FIREPLACE FUELS SUCH AS WOOD, COAL, OR ANY OTHER SOLID FUEL WILL CAUSE DAMAGE TO THE DECORATIVE GAS APPLIANCE, WILL PRODUCE EXCESSIVE TEMPERATURES, AND WILL RESULT IN A FIRE HAZARD.

LIMITATION OF LIABILITY

It is expressly understood that FMI's sole obligation and purchaser's exclusive remedy under this Warranty, expressed or implied, or in contract, tort, or otherwise, shall be limited to replacement or repair as specified above. In no event shall FMI be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by FMI's negligence. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this FMI decorative gas appliance is limited to the duration of the foregoing Warranty.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

FMI reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

FMI IS NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT

FMI shall in no event be responsible for any warranty work done without first obtaining FMI's written consent.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

A (FMI) dealer or distributor should be contacted directly by the owner for any service, including service under these warranties. The repair and replacement of any defective part covered by these warranties is the responsibility of the nearest (FMI) dealer or distributor.

OTHER RIGHTS

This Warranty gives you specific rights, and you may also have other rights which vary from State to State.

THESE WARRANTIES ARE GIVEN IN LIEU OF ANY OTHER EXPRESSED WARRANTIES. FIREPLACE MANUFACTURERS, INC. (FMI) DOES NOT AUTHORIZE ANY PERSON OR REPRESENTATIVE TO MAKE REPRESENTATIONS TO THE CONTRARY IN CONNECTION WITH THE SALE OF A DECORATIVE GAS APPLIANCE.

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